

Application No.: 10/681,567
Amendment Dated: November 10, 2006
Reply to Office Action of: July 11, 2006

MTS-3473US

Remarks/Arguments:

With the present response, claims 1-7, 9-24, 28-33, 43, and 44 are under consideration.

Claim rejections under 35 U.S.C. §103

Claims 1-7, 10-21, 24, 43, and 44 have been rejected under 35 U.S.C. §103(a) and/or (e) as being unpatentable over U.S. Patent Application Publication No. 2003/0134154 to Kirino et al. ("Kirino") as evidenced by U.S. Patent No. 6,150,015 to Bertero et al. ("Bertero").

Independent claims 1, 43, and 44 have each been amended to include the limitation of the first under layer having an amorphous structure throughout. Support for this amendment may be found in the Specification, page 39, lines 4-7, which states that "the structural unit of the first under layer is small and the film structure *is formed as an amorphous structure*. . . ." Emphasis added. The Specification does not recite or infer any other structure besides the amorphous structure in the first under layer. Applicants therefore respectfully submit that the amended language is supported by the Specification and that no new matter has been added.

Kirino fails to disclose or suggest an under layer having an amorphous structure throughout. To the contrary, Kirino discloses an inorganic compound layer formed on a substrate, which includes both an amorphous state *and* a crystal grain structure. Paragraph [0010]. Further, Kirino discloses the inorganic compound layer having a "honeycomb structure in which hexagonal *crystal grains* are two-dimensionally and regularly arranged", with a "*crystal grain* in the inorganic compound layer [having] grain-size distribution" Paragraph [0011], emphasis added. Kirino also relates the structure of the magnetic layer having "the same crystal shape as that of the crystal grain in the inorganic compound layer" [Paragraph 0012].

Bertero is cited for allegedly teaching the optimization of the size of the grains to arrive at the claimed limitation of the first under layer being substantially 2 nm or less. While Applicants do not necessarily agree with the Office's interpretation of Bertero, Applicants do submit that Bertero fails to disclose or suggest the first under layer having an amorphous structure throughout, as is recited in each of amended claims 1, 43, and 44.

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Applicants respectfully submit that neither Kirino nor Bertero, or a combination of Kirino and Bertero, teaches or suggests the claimed limitation of the first under layer having an amorphous structure throughout. For at least the reasons set forth above, therefore, Applicants respectfully submit that the rejections of claims 1, 43, and 44, as amended, are improper, and respectfully request reconsideration and allowance of claims 1, 43, and 44.

Claims 2-7, 10-21, 24 each depend, either directly or indirectly, from claim 1, and Applicants respectfully submit that claims 2-7, 10-21, 24 are patentable over the cited prior art for at least the same reasons as set forth above with respect to claim 1.

Claims 9 and 30-32 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kirino as applied above, and further in view of U.S. Patent No. 5,106,703 to Carcia ("Carcia"). Claims 22 and 23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kirino as applied above, and further in view of U.S. Patent No. 5,106,703 to Kirino et al. ("Kirino II") Claims 28 and 29 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kirino as applied above, and further in view of Birukawa ("Birukawa"). Claims 9, 22, 23, 28, 29, and 30-32 all depend, either directly or indirectly, from claim 1, and Applicants respectfully submit that claims 9, 22, 23, 28, 29, and 30-32 are all patentable over the cited prior art for the same reasons as set forth above with respect to claim 1. Applicants submit that none of Carcia, Kirino II, or Birukawa rectify the deficiency heretofore stated with respect to Kirino. In view of the foregoing, Applicants request reconsideration and withdrawal of the §103(a) rejections directed to claims 2-7, 9-24, and 28-33.

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Conclusion

In light of arguments above, Applicants respectfully submit that pending claims 1-7, 9-24, 28-32, 43, and 44 are in condition for allowance. Prompt reconsideration and allowance of same is respectfully requested.

Respectfully submitted,



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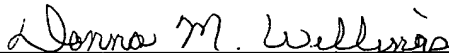
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